Curriculum

Semester 1	Semester 2	Semester 3	Semester 4
Introduction to Scientific Programming	Selected Topics of Solid State Physics	Experimental Methods of Structure Characterization of Matters	Master Thesis
Software Tools for Computational Materials Science		Introduction to High Performance Computing and Optimization	
Research Seminar and Journal Club		Plasticity	
Ceramic Engineering	Theory, Modelling and Simulation of Microstructures	Personal Programming Project	
Metallic Materials	Numerical Analysis of Differential Equations		
Semiconductors	Continuum Mechanics		
Thermodynamics of Materials	Nonlinear Finite Element Methods		
Mechanics of Materials	**Elective Modules**: Crystal Plasticity, Texture and Anisotropy; Discrete Element Method; Stochastic Methods for Materials Science; Micromechanics and Homogenization Principles; Atomic Simulation Methods; Parameters Identification in Nonlinear Solid Mechanics; Fracture Mechanics Computations		
Fundamentals of Microstructures			
Deutsch A2/1			